

their mean age was 65 ± 10 years. 47% of women were hypertensive, 38% diabetic, 21.6% sedentary, 20% postmenopausal and 12.3% obese. 294 patients (56.05%) were in New York Heart Association class II, 150 (28.7%) in class III and 18 (3.56%) in class IV. Fifty eight patients (10.9%) with atrial fibrillation. Heart rate on admission was greater than 80 beats per minute in 255 patients (48.5%). Only 6 patients had preserved systolic function. Heart failure was ischemic in 47.42% cases, toxic in 4.76% cases, 6 patients had a peripartum cardiomyopathy. About the treatment only 23.80% of women had reached the target dose of beta blockers. Women tend to develop heart failure at an older age and with better left ventricular systolic function compared with men. Women are more likely than men to have hypertension and diabetes as underlying risk factors for heart failure and are less likely to have coronary artery disease. The morbidity associated with heart failure in women is significant, but the prognosis is better than in men, since women with heart failure generally survive longer.

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Echocardiographic data of 1500 patients with chronic heart failure

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Introduction: In patients with chronic heart failure, echocardiography provides important information on the mechanism of heart failure (HF) and defining the severity of the disease.

The aim of our study is to identify the echocardiographic characteristics of patients with chronic heart failure (CHF), and to determine the predictors of improvement of echocardiographic parameters.

Material And Methods: This was a single centre, observational study. We included 1578 patients followed for CHF (heart failure which had lasted for more than 1 year) in Ibn Rochd Center of Cardiology from May 2006 to October 2010. All patients had a complete Doppler echocardiographic examination and all parameters were analysed. During follow-up, we defined an improvement of echocardiographic parameters by an increase of left ventricular ejection fraction $>5\%$ compared to baseline), change in cardiac filling pressures assessed by Doppler echocardiography from restrictive to non-restrictive pattern and decrease of RVSP by more than 20% compared to baseline.

Results: The mean age of our patients was 64.82 ± 10.12 years (16-100), and 64% were men. CHF was due to ischaemic heart disease in 55%. Mean left ventricular ejection fraction (LVEF; biplane Simpson method) was 35% (10%-69%). LVEF was $\leq 35\%$ in 897 patients (57%), 35%-50% in 505 patients (32%), and $\geq 50\%$ only in 176 patients (11%). Mean Left ventricular end-diastolic diameter (LVEDD) was 58mm (32-89), restrictive mitral inflow was found in 21% of patients and high LV filling pressures in 30% of patients. Pulmonary arterial systolic pressure was more than 35mmHg in 22% of patients. The predictors of improvement in echocardiographic data were female sex, sinus rhythm and high doses of diuretics.

Conclusion: Echocardiography is well qualified to meet the growing need for non invasive imaging in the HF population. In fact, Echocardiography provides important data for therapeutic decision-making and improve the outcome of patients with CHF.

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Prognosis of heart failure (series of 1500 patients)

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There are differences between heart failure (HF) of the woman and that of man in terms of epidemiology, pathophysiology, treatment response and same quality of care. The prognosis seems to be better in women although the mechanism is not well understood. Clinical trials of HF include more men than women which limits our understanding of this disease in women.

Our goal is to analyze the epidemiological profile of women followed by Heart Failure Therapy Unit (UTIC) in the center of cardiology see how they

are optimized to the therapeutic and prove especially that the female is an independent prognostic factor.

Our study group is composed of all patients followed at the Heart Failure Therapy Unit. 1500 patients, between January 2006 and December 2010.

Of the 1500 patients 975 were men and 525 women. The average age for men was 64 ± 4 years versus 68 ± 4 years for women. 21% of men had diabetes and 26% hypertensive versus 38% and 47% in women. 28% of men had at least one coronary lesion confirmed versus 11% in women. Concerning the treatment 78% of the men was optimized (full dose of beta blocker-ACE inhibitor conversion- Aldosterone antagonists) versus only 45% among women. After 1 year of follow up there were 8% of men who died (3.5% of cardiovascular causes) versus 4.2% among women (1.6% of cardiovascular causes) ($p < 0.001$).

The results of our study are similar to those of the literature, show that women with heart failure are treated worse than men and their prognosis is better than that of men.

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Diastolic filling pattern and prognosis after cardiac resynchronisation therapy

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Objective: To investigate the prognostic value of diastolic filling pattern after cardiac resynchronisation therapy (CRT).

Patients: 29 consecutive patients with heart failure (mean age 66 ± 8 years; ischaemic/non-ischaemic 7/22; New York Heart Association (NYHA) class 3 or 4; left ventricular ejection fraction $25 \pm 7\%$; with an indication for CRT and demonstrated left ventricular dyssynchrony by echocardiography.

Left diastolic measurements included pulsed-wave Doppler (PWD) – derived transmitral filling indices (E- and A-wave velocities, E/A ratio, Ewave deceleration time: DT).

Clinical responders were predefined as patients with improvement by one or more NYHA functional class and reverse remodelling as reduction of left ventricular end-systolic volume by 15% or more during follow-up. Mean follow-up was 8 ± 2 months.

Results: Overall, 26 (89%) were clinical responders to CRT.

The PWD-derived parameters of diastolic function improved significantly (decreased E-wave velocity and E/A ratio; increased A-wave velocity and DT) in the clinical responder group without significant changes in the non-responder group.

Reverse remodelling, occurring in 51%, was coupled to the improvement in LV diastolic function in all patients. Improvement in diastolic function was noted in 80% of survivals and only in 20% of died patients ($p = 0.033$).

Conclusions: clinical and echocardiographic responders to CRT improved significantly their diastolic function. This improvement is significantly more frequent in survivals.

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Blood pressure management in patients with chronic heart failure

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Purpose: Arterial hypertension is one of major aetiologies for heart failure. Large prospective trials demonstrated that treatment of hypertension can reduce incidence of heart failure, especially in patients with diabetes. the aim of this study was to evaluate if the management of blood pressure in patients with chronic heart failure was satisfactory in our practical.

Methods: We included 1509 patients followed for chronic heart failure for 4 years. We evaluated the blood pressure, the heart rate and pharmacological treatment.

Results: The mean age was 64.47 years (16-100 years) with male predominance (58%). The average heart rate was 84.23 beats/min; The mean systolic and